December 29, 2009 NIST Smart Grid Privacy Subgroup Meeting Minutes Notes by Rebecca Herold

Please send distribution list any necessary corrections or additions.

Thanks to all of you participating and contributing in this group!

Next meeting: Thursday, January 7, 2010 at 11:00am est

Here are my notes from today's meeting:

- 1. We reviewed the timeline for getting next draft completed. We have a lot to do in the next couple of weeks!
 - **December 22 January 3:** Actively communicate within the 4 teams to gather and update documentation
 - **December 22:** Rescheduled weekly meeting
 - **December 29:** Rescheduled weekly meeting
 - January 3: Date to have above information gathered and documented
 - January 8: Date to have above information edited and incorporated into next draft
 - January 8 15: All group members actively review draft and provide comments and changes throughout
 - January 15th: Date to have 2nd draft complete and ready for NIST's review

2. Action Items:

• Team A: Update the privacy impacts/concerns information. Include the information from our discussions today, plus other information you think is appropriate. We want all issues identified, and a balanced view and discussion of each. (See more information in section 4 below.) Send emails to each other during the next week to add to and the information within the twiki for this topic. Coordinators, be sure to get the communications going and keep them going.

Team members so far include: Chris Kotting (team coordinator), Tanya, Ward, Sarah, Mike C, Hovanes, Rebecca. *NOTE: Chris as you can see, we volunteered you for this. If this is something you cannot or don't want to do, let the team members know; we will certainly understand!* ©

 Team B: Update and include personal information descriptions and definitions and associated discussions. Include applicable information from our meeting today. (See more information in section 4 below.) Send emails to each other during the next week to add to and the information within the twiki for this topic. Coordinators, be sure to get the communications going and keep them going.

<u>Team members so far include</u>: Karen M (team coordinator), Jennifer U, Chris K, Brent S, Tanya, Lillie, Rebecca.

• Team C: Review and update the proposed privacy best practices as the group finds necessary the to include within the NISTIR. Look at the information Brent sent today, along with adding new information. (See more information in section 4 below.) Send emails to each other during the next week to add to and the information within the twiki for this topic. Coordinators, be sure to get the communications going and keep them going.

<u>Team members so far include</u>: Rebecca (team coordinator), Brent S, Karen M, Tanya, Jennifer U, Sarah, Lillie, Matthew G, Hovanes.

• Team D: Review and update documented laws, regulations and standards information, as necessary, to include within the NISTIR. Lillie volunteered to create a table of laws/regs that mention utilities or smart grid. (See more information in section 4 below.) Send emails to each other during the next week to add to and the information within the twiki for this topic. Coordinators, be sure to get the communications going and keep them going.

<u>Team members so far include</u>: Sarah (team coordinator), Stacia H, Chris K, Lillie, Tanya

- Tanya & Rebecca: Rework report introduction sections and general report structure. We'll then be able to put the information from each team into this updated report structure.
- Everyone: Let Tanya or Rebecca know if you want to be on one of the above teams, and/or send the group mail list additional information that will be useful to add to our discussions and/or report.

• Our next meeting will be on our regular day (Thursday) at our regular time (11:00am est).

3. Meeting Discussion Points

- Christine Hertzog described her work with utilities call centers and their privacy concerns, and also described her work with defining terms used in utilities and for components of the smart grid.
- Perception is that utilities will be controlling customers' electricity use.
- 1st big concern from customers was monitoring calls to call centers.
- How long are call records kept? Varies by industry. Currently 7 years, in general.
- But are these calls part of the smart grid? Part of our scope? If the call becomes an issue, then it may become attached to a customer account.
- Are we, in our NIST Smart Grid privacy subgroup work, limited to smart grid information? We need to focus upon what is new and different with the smart grid. We can mention and point out the concerns, but the focus and details should be upon what is new with the smart grid. Make sure we address this in our privacy impact discussion. When combining smart grid data with other data it creates new concerns.
- When combining smart grid data with other information considerations; smart endpoints (which we've been referencing as smart meters) just track the electricity is going through the home. The meter ID and reading go into the utility. Specific locations are associated with customers.
- Discussions are similar to the very early discussions about moving financial records online. Converting the meter data to digital data can change things. Converting to electrical format removes some protections.
- We also need to address things like looking at what utilities will now have access to within home area networks. E.g., Such as being able to tell when people are at home. (Look in the spreadsheet to see these issues and expand upon them.)
- Everything is up in the air with PEVs. We need to include discussion of what is possible, how likely, and be sure the recommended privacy best practices cover them.
- Customers have also expressed concerns about financial information and automatic payments information. Typically utilities are already managing that information well, e.g., through PCI DSS. What are the new issues with regard to the smart grid?
- Consideration of third party service providers is a gray area. Some in California (e.g,. with the PG&E activities) believe their smart meters are an excuse for utilities to rip them off and raise their rates.

- Smart Grid terms: Don't have much in Christine's smart grid dictionary that is unique to privacy concerns. Focusing on the business terms. Christine will provide some terms that are involved. NOTE: Please look at the "Smart Grid Personal Information" tab in our spreadsheet and update as necessary.
- Privacy issues within Home Energy Management systems also an area of concern. Consumers are being asked to divulge a lot of information to make their energy use as efficient as possible. E.g., can utilities actually tell if consumers actually did change their energy use that they said they would do?
- The practice of utilities putting monitors on specific appliances.
 Customers being asked to answer questionnaires. Lillie pointed to the NY Times blog; utilities could control. Fairfield in partnership with IBM. Lillie sent our group a link to the article. TB: Ed Goff may be able to talk about.
- 4. Reminder for the four teams to be communicating in next week. Below is primarily for after meeting reference to help with team communications.
 - 1) **Team A: Update the privacy impacts/concerns information** to include within the NISTIR
 - a) See twiki at http://collaborate.nist.gov/twiki-sggrid/pub/SmartGrid/CSCTGPrivacy/NIST Smart Grid Privacy G roup Dec 16 2009.xls, tab "Privacy Impacts Matrix").
 - b) We need to:
 - i) Expand upon the descriptions of the impacts.
 - ii) Document the corresponding information items that would be involved with, or cause, the impacts.
 - iii) Document where the information is obtained.
 - (1) Smart meters?
 - (2) Utility?
 - (3) Smart grid hardware vendor?
 - (4) Smart grid applications vendor?
 - (5) Entity outside of the smart grid? E.g., smart appliance manufacturer? Google/Microsoft/etc.? Other?
 - iv) Document how the risks of the impacts could be mitigated.
 - c) Identify folks to spend a little time between now and next week answering some of these questions.
 - d) Volunteers so far include: Chris K (team), Tanya, Ward, Sarah, Mike C. Hovanes. Rebecca
 - e) Send emails between group members to keep work progress going
 - 2) **Team B: Update and include personal information** descriptions and definitions and associated discussions

- a) See twiki at http://collaborate.nist.gov/twiki-sggrid/pub/SmartGrid/CSCTGPrivacy/NIST Smart Grid Privacy G roup Dec 16 2009.xls, tab "Smart Grid Personal Information").
- b) We need to:
 - i) Clearly explain how the information items obtained from smart meters and throughout the smart grid are different from information traditionally considered as information that has been considered as "personally identifiable information."
 - ii) Key point to make is that, because once a premises is attached to the smart grid it is always "online."
 - iii) Individuals within the premises are passively contributing information to the smart grid; much different than using credit cards or the Internet, which generally require active participation.
 - iv) Document examples and how they can reveal personal information in ways different from other types of networks.
 - v) Notes from last meeting to keep in mind:
 - (1) We are not picking any one existing PII definition from any standard, law or regulation, but we are creating definitions to apply to our smart grid privacy group work and also to establish a basis of common understanding for all NISTIR readers and to harmonize comments.
 - (2) There is currently not a glossary for the full NISTIR, but there is a NIST glossary for IT terms\
 - (3) Be sure to clarify the "FIPS" and "FIPPS" issues.
 - (4) Others?
- c) Volunteers so far include: Jennifer U, Chris K, Brent S, Karen M (coord), Tanya, Lillie, Rebecca.
- d) Send emails between group members to keep work progress going
- 3) Team C: Review and update the proposed privacy best practices as the group finds necessary the to include within the NISTIR
 - a) See twiki http://collaborate.nist.gov/twiki-sggrid/pub/SmartGrid/CSCTGPrivacy/NIST Smart Grid Privacy G roup Dec 16 2009.xls, tab "Proposed Privacy Best Practices."
 - b) We need to:
 - i) Determine if each of these is feasible.
 - ii) Determine if there is anything missing, and then add it
 - iii) Reword in such a way to be most usable by utilities, state utilities commissions, lawmakers, etc.
 - c) Volunteers so far include: Brent S, Karen M, Tanya, Jennifer U, Sarah, Lillie, Matthew G, Hovanes, Rebecca (coord)
 - d) Send emails between group members to keep work progress going

- 4) Team D: Review and update documented laws, regulations and standards information, as necessary, to include within the NISTIR
 - a) See twiki http://collaborate.nist.gov/twiki-sggrid/pub/SmartGrid/CSCTGPrivacy/NIST Smart Grid Privacy G roup Dec 16 2009.xls, tab "Laws|Regs|Standards|etc."
 - b) This is not meant to be an all-inclusive list, and should not be presented in such a way that it could be construed as legal advice.
 - c) We need to:
 - i) Make this a section that basically acknowledges that there are many different laws, regulations and standards that address privacy in some ways, but that the smart grid is creating new concerns, risks and issues that may not be addressed by them.
 - ii) Provide a high-level listing of the laws, regulations, and industry standards that cover/address personal information privacy and clearly point out how these laws may not protect privacy for the information within the smart grid.
 - iii) Reference the personal information discussion from Team B.
 - iv) Explain the unique issues that it would be beneficial for laws to cover to protect privacy in the smart grid (okay with NIST?)
 - v) Provide the longer list of laws, regulations and standards within an appendix to accompany the report? (This addresses some of the comments received)
 - d) Volunteers so far to write this section include: Sarah (coord), Stacia H, Chris K, Lillie, Tanya
 - e) Send emails between group members to keep work progress going

Lillie: Will create a table of laws/regs that mention utilities or smart grid